DESIGNING AND INSTALLING CODE-COMPLIANT PHOTOVOLTAIC (PV) SYSTEMS

3-Day Workshop Announcement

As team leader for the Island of Hawaii MSRI Partnership, Hawaii Electric Light Company (HELCO) is pleased to announce an upcoming 3-day workshop by Bill Brooks on Designing and Installing Code-Compliant PV Systems.

These workshops promote the design and installation of high quality, cost effective PV systems. They also provide an intensive overview of small-scale solar electric generation, basic system design issues, and installation requirements to meet the National Electrical Code (NEC) and provide years of good performance.

Dates / Time: Thursday, Friday, and Saturday, April 3, 4, & 5, 2003. The workshops will begin at 8:30 AM and end at approximately 5:00 PM. <u>Attendees are expected to commit to attending all three days of the workshops.</u>

Location: NELHA meeting room, Kona (Just south of the Kona Airport).

Who Should Attend: Electricians, Electrical Contractors, Solar Contractors, Inspectors, Engineers, Architects, and electrically versed members of the general public.

Prerequisites: Attendees are expected to have a basic understanding of electrical systems. This workshop is designed to augment the understanding of standard wiring practices with those issues that are specific to PV installations.

Cost: \$60 registration fee. (Equivalent courses given in California cost from \$150 to \$350.)

How to Register: Complete the attached registration form and send it, along with your check for \$60 to the address provided. Space is limited and registration will be based on the date registration form and check are received.

Training Content:

- *****Basic PV Concepts
- **★**Solar Energy Fundamentals
- **★**Site Analysis
- *****Performance Calculations
- ★Basic PV Design Issues
- *****Batteries and Inverters
- *****Basic Installation Issues

- **★**Special DC Wiring Considerations
- **★NEC Article 690 Overview**
- **★**Wiring Methods
- **★**System Grounding and Surge Protection
- **★**System Checkout Procedures
- **★**Utility Interconnection

At the end of the course (day 3) a 45-minute exam will be proctored for those wishing to receive a Training Certificate for the course.

This workshop is made possible by a U.S. Department of Energy Million Solar Roofs grant #DE-FG51-02R021355.

DESIGNING AND INSTALLING CODE-COMPLIANT PV SYSTEMS Workshop Registration Form

	Kona, Hawaii
Workshop Date:	April 3, 4, 5, 2003 (Thursday, Friday, & Saturday)
Location:	NELHA Meeting Room 73-4460 Queen Kaahumanu Hwy Kailua-Kona, Hawaii (South of Kona Airport, next to ocean)
Sponsoring Agencies:	Hawaii Electric Light Company Island of Hawaii MSRI Partnership Natural Energy Laboratory of Hawaii Authority U.S. Department of Energy Million Solar Roofs Initiative
Presenter:	Bill Brooks of Endecon Engineering
Workshop Time:	8:30 a.m. to about 5 p.m.
Hotel Information:	King Kamehameha's Kona Beach Hotel, 800-367-6060 Uncle Billy's Kona Bay Hotel, 808-961-5818 Royal Kona Resort, 808-329-3111 Manago Hotel, 808-323-2642
Note: Please use a separate form for each attendee.	
Mr. Ms. First Name	: Last Name:
Title:	
Affiliation:	
Address:	
City:	
	Fax: Email:
Occupation: Electrician Engineer Contractor/Builder Developer Energy/Sustainability Architect Solar Vendor Solar installer General Public Other What do you need most out of this workshop?	
Space is limited. Please register by March 21, 2003	
Registration (fee includes workshop, materials, lunch and break refreshments) Registration Fee: \$60 (Space reserved in the order that requests and checks are received.) Payment Total Amount Enclosed: Make checks payable to: HELCO Check # Refunds must be requested in writing no later than March 21, 2003. No refunds will be made after this date. Registration attendee substitutions may be made by calling Tammy at 808/969-0118. HELCO reserves the right to cancel this workshop.	

Send registration to: Tammy Miyashiro, HELCO, P.O. Box 1027, Hilo, Hawaii 96721-1027 Phone: 808/969-0118, fax: 808/969-0135, Email: tmiyashi@hei.com